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The Johns Hopkins Magazine

THIS ? GENERATION

IN THIS ISSUE: AN APPRAISAL OF THE CLASS OF '60

THIS GENERATION?

HI, ANASTASIA. How's the family?

★

"Mommy, are we really vampires?"
"Shut up and eat your soup before it clots."

★

Aside from that, Dr. Verwoerd, how did you enjoy the fair?

—SICK JOKES, *circa* 1960

THIS GENERATION?

"SEX ISN'T a matter of morals any more," he assured me. "It's part of *personal relations.*"

"It is?"

He kissed me and let me touch his eyelashes.

"Of course. It's the pleasant, friendly thing to do, Merrit, like shaking hands or making sure you catch the other person's name when you're introduced. We have to get along with people, there's nothing more important today. In what shape would we be if everyone went around rejecting each other?"

—TWO COLLEGE STUDENTS,
Where the Boys Are
BY GLENDON SWARTHOUT

THIS GENERATION

They lie at the mouths of their burrows, watchful and suspicious, and they warn potential intruders away from their privacy. . . . They are hard to smoke out. Sometimes a professor is baited into protest by the rows and circles of their closed, watchful, apparently apathetic faces, and says in effect, "My god, *feel* something! Get enthusiastic about something, plunge, go boom, look alive!"

—A PROFESSOR'S CONTRIBUTION TO
"THE CAREFUL YOUNG MEN,"
A SYMPOSIUM IN *The Nation*

LISTEN TO THEM TALK; watch them in action; by all outward appearances, they seem to be different. And all the analysis and label pinning that has been performed on this generation reinforces the conclusion that they *are* different. But are they? Beneath their youthful fads and pardonable excesses, do the members of the younger generation "tick" in some unique way?

In 1956, The Johns Hopkins Magazine first met this generation. In an article titled "Open Letter to a Freshman," we welcomed the Class of '60, sketched for them some of the traditions of Johns Hopkins, and urged them to use the college years to equip themselves for the richest kind of life. Now that those freshmen are seniors about to depart this place, we are curious about them. Because it stands in the front ranks of a generation that faces some of the most crucial decisions of all time, we wanted to know more about the Class of '60. Who are these young people and what do they believe? What do they expect from life and what can they look forward to? Are they prepared to deal with the situations which will almost surely confront them?

These are some of the questions we had in mind as we began to prepare this issue. We invited the seniors to submit essays describing their generation. We received one. Perhaps this tells us something about the Class of '60. Edmund G. Shower, Jr., the single senior who responded to our invitation, describes and defends his generation in an article beginning on page 7. And he suggests for it a noble, if idealistic, mission.

For some of the other answers we sought, we turned to an alumnus—member of the Class of '40 (page 29)—and to three senior members of the faculty—representing the humanities, science, and engineering (page 20).

Had we expected to present in the following pages a complete and wholly accurate picture of the younger generation and its problems, we would have been disappointed, for a generation is a nebulous and elusive thing, especially in its own time. It exists primarily as a generality, and it is only in generalities that it can be discussed. Perhaps the safest conclusion to be drawn is that there is no such thing as a "Younger Generation," only youth in its traditional defensive posture against its elders. Perhaps there is only an assortment of individuals with no collective identity. And very likely, this is as it should be.

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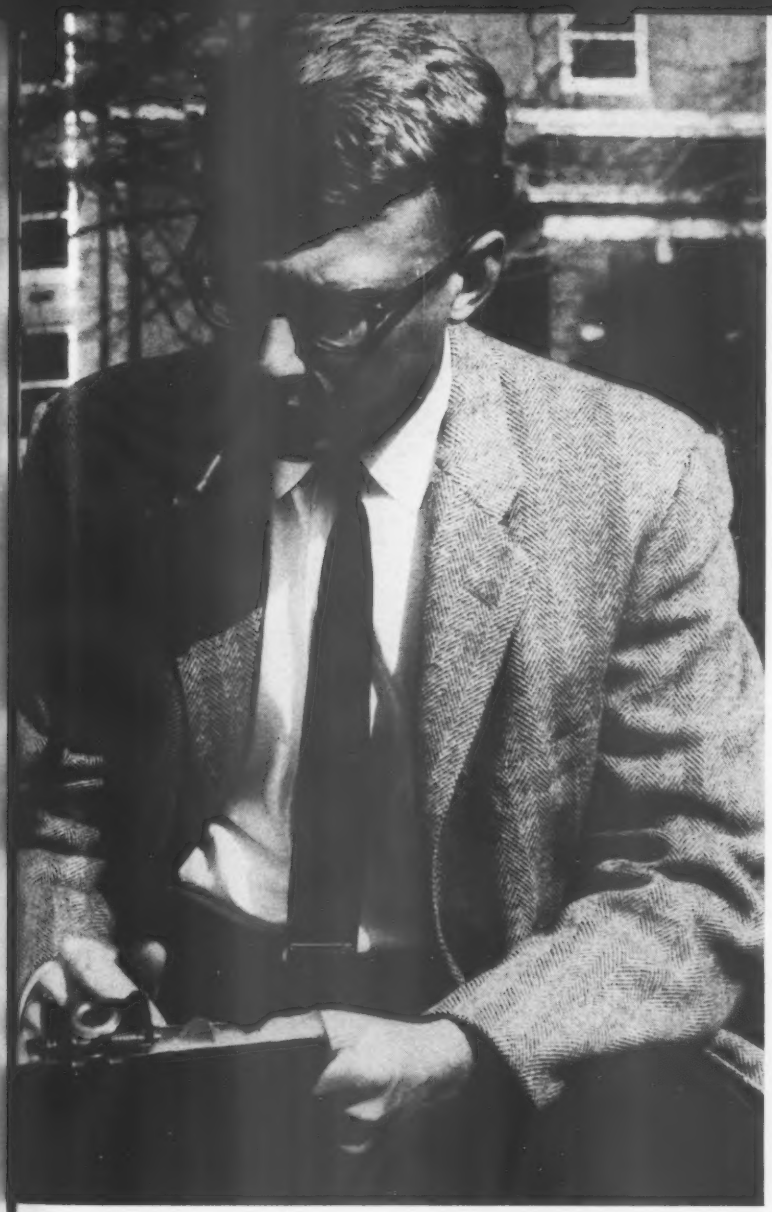

By
EDMUND G. SHOWER, JR.

AN OPEN LETTER TO OLDER GENERATIONS

THE CASE FOR THE DEFENSE

In reply to the many charges and glib labels hurled at America's younger generation, a member of the Class of '60 offers some spirited defensive arguments

NATIONAL
BOHEMIAN

ANOTHER FOOLISH REMARK often heard is that Americans have a right to know what's going on. Most people realize the foolhardiness of such a suggestion.

—U. S. AIR FORCE TRAINING MANUAL

We don't apologize for our apathy . . .

THE TIRED WORDS fall on our unreceptive ears: Your generation inherits more crucial problems than any generation of the past. You must save the world—from ignorance, from overpopulation, from false ideologies, from annihilation.

We hear—we have heard many times—and if we shrug, it is not without reason. Sure, we will cast our ballots for democracy and our dimes will march for charity, but there doesn't seem to be much we can do about these perils. The problems of the world have been turned over to the specialists, bureaucrats, and uniformed Elijahs, less responsible to an electorate than to their own questionable standards of integrity.

A colossal myth has been created—that of "the well-informed citizen," and we seek solace here. But what are we well informed about? What fonts of truth are reliable in these days of amoral mass media and of contradictory bits of explanation sifting down from "informed government sources"? Many well-informed citizens approved the Munich Pact. And later, well-informed German citizens applauded the work of Dachau's ovens.

My generation cannot afford the naïveté and the self-certainty of "the well-informed citizen," for we would risk endorsing far more costly mistakes than those made by our elders. We are resigned to a position of grayness and indecision. If my generation seems inert, it is not because we do not care; it is because we feel helpless.

Photographed by M. E. Warren
for The Johns Hopkins Magazine

ALAN J. BEARDEN

Behold, our badges of

MY GENERATION is more utterly alone in its domicile than any previous generation has been. We are not so much "lost" as rootless. We have severed our connection with the older generation, not with the defiance of a Fitzgeraldian rebel, but with resignation. For we did not choose to make the old ideas obsolete; the changes which rendered them so were foisted upon us.

Left with little more than our youthful zest, we

EACH GENERATION is as independent of the one preceding, as that was of all which had gone before.

—THOMAS JEFFERSON, 1816

# of dentity . . .

have been forced to construct our own world. Most obvious in our design is a set of superficial symbols; this generation—like all generations—has its uniform, its fads, its own mores. The skirl and bump of rock 'n' roll permeate the land; insolent sports cars and swift, sleek convertibles contribute to the peril of the age; khakis and leotards top shuffling feet. We share sick jokes, "coolness," and a secret sympathy for Kerouac and his disciples.

But these are, after all, only the adornments; they do little more than provide us identity and shock the older generation into recognition that we are here and stand apart. Beneath this veneer lies the important, still-unfinished structure: our mental and spiritual fortress against a host of future uncertainties. Every generation seeks to erect a framework of values in which it can react to the demands upon it and find justification for its reactions. Our generation is no exception. But what materials have we to build with?

If I were to try to find some icon for my generation, I would look for a mythical creature with three eyes, one of which was detached from the head and always at a respectable distance from the body. We are the generation of the third eye, the eye of self-consciousness, the eye of self-criticism.

—A College Senior, 1957, in
The Unsilent Generation
edited by Otto Butz

The group is our hiding place . . .

How can we build a sound structure of values when we do not see beyond self? Our intellectual forebears—Marx, Darwin, Freud, *et al.*—have left us with nearly barren ground: with principles and "truths" robbed of all certainty, permanence, or motive power; with a self so introspective and doubting that we can be sure of almost nothing. We are a generation which wants to believe, but dares not. We would like to be self-reliant, but we have no firm principles to grasp for support.

As a consequence, we seek security and fulfillment in our society's potpourri of insulated groups, for it is in the group that life gains meaning, that interests coagulate, that goals can be set which are not out of reach. We have learned to be level-headed, to be "solid," to pursue only the Limited Dream.

The college campus is a microcosm of our society—rife with organizations and activities and fellowship groups which have been elevated to the level of the curriculum and encouraged by the authorities. From the fraternities we will go on to the country clubs, from the glut of campus officerships into business wheeling and dealing, from the exclusive bull sessions into private neighborhood social "sets."

And critics do not shame us with their diatribes. Left without roots, without inspiration, without direction, what can we do but adjust?

WHAT IS the university for? . . . it is to hand down to the generations which come after us the torch of experience by which we have been enlightened.

—DANIEL COIT GILMAN, 1872

College: the escape from the chrysalis . . .

WE PASS THROUGH college on the road to adjustment. Four years—a gantlet to be run in quest of the Limited Dream, in pursuit of credentials.

In part, these years have served this end and lent sanction to it; but in addition, they have effected a disquieting metamorphosis. No longer can we be wholly complacent or cynical or irresponsible. First of all, we have come to discover the boundaries to the uniqueness of our generation. We have debunked the old ideas with the relish of youth; but more important, we have come to feel a continuity with the past. As spectators to the drama of human adventure, we have seen ourselves mirrored in the action again and again, we have recognized here and there serviceable bits of wisdom, and we have felt the burden of the ages firmly handed to us: Make mankind endure; improve its condition.

In the protective atmosphere of the campus, these responsibilities take root. The problems of the world have been ours to debate, sometimes to solve (academically and frequently naïvely), and sometimes to translate into the overt action of a lunch-counter demonstration.

We have emerged from our cocoons of ignorance, inspired to accomplish great things. On the eve of our commencement, we are eager to leave the ivory tower and to enter the market place as new men, as educated men.

In government, as in virtue, the hardest of hard things is to make progress. . . . The reason is that the people, who are sovereign, have no single ear which one can approach, and are selfish, ignorant, timid, stubborn, or foolish.

—Woodrow Wilson, 1887

ALAN J. BEARDEN

For our generation, lonely leaders are not enough . . .

As INDIVIDUALS, we will react to our college education with varying degrees of intensity. All of us will have been influenced by it, but most of us will soon be preoccupied with the mundane business of living. Our newly discovered sense of awareness, our feelings of responsibility, our concern with ideas, will fade like smoke into forgotten corners of our personalities. However, as educated men, we will still have the potentiality to be and do what our education has a right to demand of us. But except for rare occasions, the true power of our college education will lie dormant and decaying within us.

A few, a small group from my generation, will cling with fierce tenacity to the values and promises of their college years. Their love of learning, their passion for truth, their insistence on excellence will grow and possess them. To this lonely minority will fall (we hope) the fate of leadership.

But every generation has produced such a majority and minority. For my generation, this is not enough. If we are to bring new strength and wisdom to the fateful decisions of our times, we must do more than produce the ineffectual mass and its handful of lonely leaders.

As individuals, we must create a moral and intellectual fabric so pronounced that it will become the posture of our generation. Then we will not only produce the inspired leadership of a Moses, a Lincoln, a Wilson, but we will endow our leaders for the first time with the ultimate power of a democracy.

I have no reason to believe that my generation will do this. I do not know if the threat of nuclear destruction or the reaction to "the Age of Payola" are enough to lift us out of the normal pattern of human behavior. I am not even sure that if my generation succeeds in this, it will be enough. But this is a mission appropriate for my generation.

WILLIAM BAIN

IF THE COMMUNISTS conquered the world it would be very unpleasant for awhile, but not forever. But if the human race is wiped out, that would be the end.

—BERTRAND RUSSELL, 1958

A final word . . .

MY GENERATION might argue that we would be justified in sitting on the beach waiting to sip hemlock under clouds of fallout, or in gorging ourselves on hedonistic pleasure in anticipation of the apocalypse. We have only history and our knowledge of human behavior to suggest our destiny. And this gives little reason for optimism. Our decision-makers, our statesmen, our prophets have made human survival the paramount question of our age, and the greatest democracy of all time considers the advantage of preventive war and weighs its principles on the scales of expediency.

If the noblest truth our elders bequeath us is that "humanity must survive at all costs," then they have left us a niggardly moral inheritance. Do we acquiesce in the ideological struggle just to save the featherless biped from extinction?

Once it could be believed that devotion to human dignity—the ultimate touchstone of life's worth —would always make slavery temporary, that the free spirit of man would ultimately overthrow any oppression to regain liberty. But now the belief is naïve. This is an age in which man has learned to tamper with the mysterious mechanisms of emotions and behavior, and potentially to convert the race into complacent Orwellian automatons. A surrender now would guarantee man's physical survival, but could very well bring to an end man's noble adventure, and cause his future history to degenerate into a morbid experiment.

My generation is caught amidst the pleading voices of man's past and the shouts of the saber-rattlers of the present; it is we who must answer the grave question: Is survival the greatest reason for surviving?

By KHANH KIM HUYNH

A foreign student ventures a rebuttal

THE AMERICAN builds a house to spend his latter years in it, and he sells it before the roof is on; he embraces a profession, and gives it up; he settles in a place, which he soon afterward leaves, to carry his changeable longings elsewhere. . . . Death at length overtakes him, but it is before he is weary of his bootless chase of that complete felicity which is forever on the wing.

—ALEXIS DE TOCQUEVILLE, 1833

. . . And a dissenting opinion

MR. SHOWER clings to a notion favored by many self-conscious Americans and several foreign observers: that Americans seek security, that they frantically pursue stability in this rapidly changing world. I think this view does injustice to the present generation of America.

You Americans are restless; not only do you choose not to stay put, but you seek changes, constantly experiment and improvise. You value deeds, not theories, but you do not rest on your deeds. Your thinking is flexible, for you have few traditions that you hold sacred. One tradition does still have a firm grasp on the American people: a belief in progress.

It is true that students from foreign lands see the present generation of America as "soft"—self-centered and apathetic. While in other countries students wave banners and hold rallies for political and social causes, they find the Americans usually express their spirit in the form of fraternity pranks or "panty-raids." American students pay little attention to national and international affairs; they buy a newspaper, take a diagonal look at the front page, and go on to digest the sports results.

Contrary to Mr. Shower, I think this apathy stems from strength and optimism, not from a sense of helplessness and pessimism. Nothing has really happened to diminish the confidence of this generation or hinder their almost mystical belief in progress. America remains a prosperous economy, encouraging individualistic goals, optimism, experiment, and risk-taking.

I don't think we can expect a moral transformation in this generation, as Mr. Shower hopes, nor do I think it necessary. Just as other nations, America has its own strength and weaknesses, but the latter are merely the inexpensive price for a prosperous economy, a stable society, and an allowance for experiment. Ever since the emergence of America to the position of world leadership, the American pattern for progress has been contagious. The traditional societies of Europe and Asia, including my own country, Viet-Nam, have opened the way for the invasion of American ideas and pattern of life. Of course, this also means the inheritance of American weaknesses, but these are worth the price for the better conditions of living.

Thus democracy will be saved, not by miraculous changes in the moral outlook of the present American generation, but by the contagion of their enduring faith in the inevitability of progress.

Don Cameron Allen

H. Bentley Glass

Robert H. Roy

A WORD IN PARTING

Three professors' "last lectures" to the seniors

Illustrations by
ROBERT ROSS

The humanities are at their best when they give a man a sense of continuity and of worth, and this is all we should ask of them

HUMANITIES/

Don Cameron Allen

IN MOST COLLEGE CATALOGUES the reader comes upon the heading "Humanities," and mustered under it are found the departments of language and literature, of philosophy, of fine arts, and usually, of history. The immediate suggestion of this arrangement is that all the disciplines under it have something to do with that body unpolitic called "humanity."

By parallel logic it could be assumed that those disciplines called "Sciences" have all the knowledge and know the knowable; whereas those called "Social Sciences" apply knowledge in a social fashion to society. If one asks a graduating senior to make a distinction between these great segments of the undergraduate college of arts and sciences, he is likely to state that the Humanities are the most voluble and least practical of college subjects, useful "for cultural reasons" to most people, valuable in themselves only to certain people, such as women, rich men's sons, and congenital schoolteachers. To concentrate in this area, I have been told, one must not have to earn his living or else be satisfied with a very small one.

There is no question that from a modern point of view the term "Humanities" is obscure and disturbing. It possesses the unsound implication that it has a corner on human wisdom, a notion of exclusion that finds only limited support and is grossly untrue. Biology knows a great deal about man and so does economics. Many other disciplines not found under the banner of the Humanities devote themselves completely to the human situation. Actually most of our academic "big terms" have lost their meaning and should be revised. Science sometimes gets to know less as it learns more; social science becomes less social as it turns more and more to the IBM machine; and some of the adherents and methods of the Humanities are notably inhuman.

The title, Humanities, has hung on for a long time. It was used in fifteenth-century England to describe all forms of polite learning that had nothing to do with theology; it stood in these generations as the counterpart to divinity. Two hundred years later it began to appear in its present plural form. An English physician, writing at the beginning of the eighteenth century, remarks that he had been "instructed in the humanities as well as in the *ars mendendi*." It was his way, I imagine, of separating the human from the humanitarian. But one should not suppose that the history of the word "Humanities" begins in England; it was invented by humanity when it was at its best in Rome, and we can turn back through human biography to find the proper pages.

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SCIENCE/ H. Bentley Glass

We need a philosophy that will embrace the rights and needs of the individual as well as the welfare of society--a dynamic philosophy that will grow with man's scientific understanding of himself and his world

EVERY YEAR, in the United States, about 160,000 babies, or 4 per cent of the four million born, have some sort of tangible hereditary defect evident either at birth or later. A vast army of some seven million persons in our population suffer from disabilities caused by their genes, and most of them were born to unaffected parents. This is the present genetic burden of our people, and we should not want in any way to add to it.

Yet we are assuredly doing so, both by increasing the rate of mutation through the exposure of the germ cells of persons still in their reproductive years to high-energy radiations from X-rays, radioactive wastes, and fallout, as well as by lessening the force whereby natural selection in past times has made it unlikely for individuals with manifest effects of harmful genes to pass them on. If all diabetics, to take a single example, were preserved alive through their reproductive years by means of insulin injections, the diabetic population would increase until it reached a new level at twice the former percentage. However unwittingly, doctors are thus making ever more business for themselves, and not in respect to diabetes alone.

I have heard it seriously proposed that it would be better for mankind if we were all to have an identical genotype, assuming that that genotype was the optimum. (This recommendation of course ignores the fact that maleness and femaleness depend on a difference of the genotype; I don't suppose any proponent of the idea really wants to do away with sexual reproduction, although that might in fact be necessary if the optimum genotype, once secured, was to be preserved.) True, the nature of man, *as a species*, is extraordinarily flexible, and adaptable and equally gifted in all directions. Great musical genius, as seen in Mozart and Schubert, is not necessarily associated with other kinds of eminence, and might even be incompatible with certain other types of specialization. An elementary study of the biology of cells demonstrates the significance of differentiation and specialization at the level of the many tissues of the body, as well as the corollary that the cell that specializes in one direction loses in the process some of the general capacities of the unspecialized cell. The muscle cell is good at contraction but poor in secretion. The retinal cell has a marvelous sensitivity to light, but is really good for nothing else. In human society, the same generalization appears to hold true. The jack-of-all-trades is master of none. Our society is based on diversity and specialization. With this cultural characteristic our genotypes are in harmony. In genotypes, diversity and specialization also abound. It would be relatively simple, granted the license to do so, to apply to mankind the methods so fruitfully used in breeding animals and plants for human use, and to produce a number of purebred types suited for different social purposes. These might be far more different from one another than our present major racial stocks. But it could be done only by the most ruthless elimination of individuals deviating from the desired pattern and by

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CHANGE, OF COURSE, has always been a characteristic of the world, and disruptive though it is, man and organisms of all kinds have demonstrated a remarkable capacity to adapt and survive. Human society has survived plague, starvation, innumerable wars, political, economic, and technological revolutions, the atomic bomb, and mayhap will survive the hydrogen bomb and fallout, too.

For a long time, the rate at which changes took place, at least those of which men were conscious, was not in itself a matter of particular concern. But since change is disruptive and does require adaptation, then the rate of change becomes as important as change itself. Life and society not only must adapt to the changes that take place, but must be affected by the rate at which adaptation is demanded. If so, it follows that some rate of change must represent the threshold of tolerability, beyond which the stresses of rapid change become self-aggravating and destructive. We cannot specify what this threshold rate of change is, but we may assume its existence.

This is pretty fanciful, but there is a point to be made. There is a good deal of evidence that the rate of change of many things which affect our lives is increasing at an ever-accelerating rate. Technological change, perhaps most obvious and dramatic, will serve to provide examples.

When Charles Babbage produced the first calculating machine in 1842, he advanced the processes of arithmetic by a giant stride. But Babbage's accomplishment has been dwarfed by the amazingly rapid evolution of computing devices in the past twenty years. Relative to the abacus, Babbage's machine was more complex, required more time, ingenuity, and effort to create, and was more costly to produce. Yet it had a shorter span of useful life than the abacus before it. The greatly superior computing machines of today, increasingly effective, complex, and difficult to create, are probably destined to have shorter useful life spans than Babbage's invention.

In the field of military weapons, it has been said in jest that the long bow required ten minutes to invent and then became the dominant weapon for a century or more. The musket which followed was a far more effective, sophisticated, and technically difficult device, yet its longevity as a dominant weapon was less than the long bow but greater in turn than each of its own more complex successors: the rifle and the machine gun. According to Ellis A. Johnson, director of the Johns Hopkins Operations Research Office, a fighter plane of World War II required 17,000 engineering man-hours to create and had a useful operational life of several years. The fighter plane of today demands 1,400,000 man-hours in engineering, and the first ship is obsolete as it comes off the production line. This is the trend: an ever-increasing complexity in conception and creation, accompanied by an ever-accelerating rate of change.

Advertising agencies, politicians, industrialists, all of us, in fact, hail rapid technological developments as a

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The rate of change makes the technology of today obsolete tomorrow; but there are non-technological changes, interacting with technology, which may have graver consequences for the race

ENGINEERING/ Robert H. Roy

HUMANITIES

Continued from page 21

Romans used *humanitas*, the mother of our word, in a number of ways, but they adorned it with special meanings that those second Romans, the men of the Renaissance, found highly attractive when they established a doctrine based on this-worldliness and on a learned form of other-worldliness which they called "Humanism." Flaccus, a Latin poet, and the younger Pliny, a man of taste, always associated the idea of *humanitas* with Greece, praising Athens as the fountain of "humanism, learning, religion, virtue, justice, and law." There is in this praise no notion that *humanitas* has to be borrowed; the Greeks were simply the first, and the Romans tried to embellish the gifts they had received from them. Although the Romans sometimes misused their Greek inheritance, it was their concept of *humanitas* that separated them from the barbarian and that the barbarian, in turn, sought to acquire. The better Britons of Tacitus' day provided themselves with *humanitas*, according to that historian, by imitating Roman manners. The descendants of these Britons in the seventeenth, eighteenth, and nineteenth centuries followed the same wise pattern.

But *humanitas* as the Romans understood it not only filled the mind of its disciple with Greek wisdom but shaped his character and improved his disposition. When Cicero, an ardent pro-Hellene and a sincere expositor of the Humanities, talks in his lawyer fashion about *humanitas*, he links it with other noble traits of temperament. It is companioned in his mind with *benignitas* or "friendliness," with *mansuetudo* or "gentleness," with *urbanitas* or "courtesy." He gives us the impression that the man who has one of these natures is likely to have the others; in fact, the possession of *humanitas* implies the possession of the others. These characteristics a Renaissance humanist (who seldom had many of them) would say are the proper attributes of a gentleman. This notion of the Humanities as being possessed by and also producing the finest type of human being prevailed for several centuries in England and, consequently, was eagerly accepted in America. The fine nineteenth-century gentleman, whose Greek and Latin culture was made manifest by the Attic portico on his house and the Roman dado in his drawing-room, was the ideal of eighteenth- and nineteenth-century society. Invested with wealth and/or social status, this man (whose representatives were not so numerous as they are given out to be) read Homer and Horace, looked through his telescope, collected birds' eggs, redid the exhibitions of Galvani, was kind to his servants, and wrote bad verse and delicate prose. He has gone from our midst and he is not too much missed. He stood for an end towards which certain neo-humanistic philosophies of our century strained, but evolution was too busy and too complicated for him to survive.

I think that the Ciceronian ideal and the subsequent Renaissance notion of a gentle nature shaped and adorned by the arts and sciences—for the sciences in their early, inexact state were members of the Humanities—cannot be regarded as the current goal of the Humanities. It is not that the friends and practitioners of the Humanities scorn good customs, kindness of heart. They regard all of these qualities as most desirable, but they do not believe that the disciplines now marshalled under the Humanities are intended to teach manners and morals. The sciences—mathematics, chemistry, physics, botany, etc.—which once were part of the humanistic tradition and the genteel pattern have long ago left the palace of art. Determined as they are to better man's lot and enlarge his universal view, they had to drop man along the way (as the celebrated humanist Francis Bacon suggested) in order to enable him to secure these fine ends accurately and quickly. The physician, the artist who learns from the scientist, has replaced his sense of touch with a fever thermometer and his sense of hearing with a stethoscope. The scientist has to go beyond even these primitive devices. He now gets his best result by only supplying the finger that pushes the button. He hopes, of course, to improve on this very poor technique.

I THINK THAT we can say that the Humanities no longer do those human things that they were once said to do, and I must admit that I have serious doubts whether or not they ever did any of them. But to come to some statement about their immediate virtues, we shall once again have to interview the past, and this time we can call upon a second-century grammarian, Aulus Gellius, for an oft-quoted definition. Some people, says this author, get *humanitas* mixed up with "philanthropy" or "humanitarianism," but no one who ever spoke Latin correctly makes this mistake. *Humanitas*, he goes on, results from an education in the liberal arts. "Those who earnestly desire and seek after these are most highly humanized, for the pursuit of that kind of knowledge and the training given by it have been granted to man alone of all animals." Knowledge of the liberal arts, we are here informed, does not really make man a philanthropist; it likewise does not seem to insert him into the genteel tradition, making him friendly and courteous and a good deal superior to the average barbarian. The liberal arts simply provide the *humanitas* that makes a man better than apes, asps, and antelopes.

The liberal arts are what used to be called "the sciences and the arts." They are called "liberal" because they were said by the ancients to be studies worthy of the attention of free man. Ralph Barton Perry, who once wrote a great deal about humanism, was inclined to turn this notion inside out and think of the liberal arts as conferring freedom. The ancients had a better idea. Unless one were free, he could not study these subjects. If he wanted to make a distinction between the world of animals, the *ex universis animantibus* of Aulus Gellius, and the world of men, it could be made on this point; namely, that animals are so tied up with supplying their physical necessities, with fending off other animals, and with hiding or running away from the rampages of nature they have no time for the liberal arts.

In order to have time for the liberal arts or the Humanities man has first to possess the necessary materials for the

maintenance, protection, and propagation of life. There is no question that without a little more than the minimum of these requirements, the gifts of the Humanities are not too pleasing. To provide himself with this precondition man must first have the practical sciences and arts. He must weave a coat before he makes a tapestry; he must tame a horse before he makes one of bronze; he must learn plain ways of communication before he writes a poem. When all these other things are done and done with ease, when all these requirements that the other animals cannot supply comfortably or at all are in hand, then man is ready for *humanitas*.

THERE ARE SUPPORTERS of the Humanities who will argue that these disciplines are paramount to all others. Some will say that he who knows history hardly needs bread, that Greek is more sweet on the tongue than honey, that only small quantities of land and sky are needed by him who reads philosophy. With some of this I can almost agree. Philosophy and a Ford are better than no philosophy and a Cadillac; soup and bread and Shakespeare are better than seven courses at the Chambord and Joyce Kilmer. The little edge of material profit is always necessary to give man the time and relaxation unknown to the world of animals.

Far more incorrect than those who put the Humanities at the summit of human culture are those who claim for these disciplines a utilitarian value. Too many advocates of the humanistic disciplines have attempted to defend them against the attacks of the narrow utilitarians by insisting that the Humanities too belong to the same camp. We are, consequently, informed that the study of the classics will make one a competent writer of his native tongue. This is a point that can be blunted by an afternoon's reading in any one of the periodicals published by and for classicists. Once we were invited to the study of Spanish so that we could sell farm machinery in South America, and we are now told that a knowledge of Russian will enable us to read the traffic signs on the moon. History was held up to us as something from which to learn, and special *pensées* were invented to this end. One of them was: "He who does not know history must relive it." But none of these uses of the Humanities is humanistic; they merely shove the Humanities among those other skills that enable man to get a little more meat and shelter than the crowd with horns and tails.

Some of the advocates of the Humanities also put forward the theory that only those who concentrate in these subjects have broad and full lives. When this theory is much more temperately expressed, one can readily agree. Those who scorn the Humanities have certainly limited their lives, but a disregard for any intellectual pursuit implies the same unhappy narrowness. To understand this situation one has to discriminate between the professional student of the Humanities and the amateur. It is only the latter who can afford to live in modern society the broad and full life that this old-fashioned ideal permits. Actually the professor of the Humanities is likely to be as narrow a specialist as his colleagues in the sciences or the social sciences. There was, of course, a time when the genteel tradition, as Santayana called it, prevailed and the humanist could read all the major poets from Homer to Browning. Now, he must know all the minor figures who circled about his major poet plus all that was thought, said, and done in that poet's generation. Old shallow breadth has become a deep narrow bore. The professional humanist now becomes an expert in the Age of Ausonius, or the early comedies of Shakespeare, or the Peace of Tilsit. It is only the amateur, who can afford, as it is put, "to spread himself out."

But while the modern expert in the Humanities must needs—as all other modern experts—dig deeper and deeper in a steadily diminishing area, he stays within limits that are human and uses methods that are plainly mortal. His colleagues in the other disciplines have to put man out in order to bring accuracy in. Their results may benefit man, but their instruments and techniques must be, as nearly as possible, non-man. The humanist, no matter how limited his area, how specialized his results, keeps his eye on the unmeasurable aspects of man. The history of that branch of the Humanities called Philosophy can make clear what has happened to a humanistic discipline as parts of it were changed from man to measurements.

Once Philosophy stood pre-eminent attended by Rhetoric, Music, Arithmetic, and a few other intellectual helpers. Her only rival in the realm of learning was Theology, but scholars were continually trying to reconcile these two queens or explain that they were not royal competitors. Outside the walls of this legitimate learning were some dubious and heterodox disciplines, like Astrology and Alchemy, seeking vainly for admission. This was the happy primal state from Roman times until the Age of Enlightenment; then gradually, but surely, something not unexpected happened. Mathematics, Astronomy, and Chemistry (reformed Alchemy) took Physics away from Philosophy. Then Psychology eloped with Epistemology and Political Science with Politics. Economics outgrew its original household state and required a large private kingdom. Finally, Ethics, for whose hand Philosophy and Theology had long contended, settled the matter by accepting a polyandrous relationship with Psychiatry, Cultural Anthropology, and Economics, although it was reported that the first of these lords beat her. In the end, Philosophy was left with all the problems that the sciences and social sciences were unable to solve, did not want to solve, or had not as yet noticed. As each one of these areas left Philosophy, man was shaken out of the seceding state or reduced to a statistical blank face. Now if one wants to see man, individual man, groping, pondering, hugging his hopes, wiping the tears from despair, getting the right answers to the wrong questions, one can seek him in the land of current Philosophy. Composite man, cross-section man, organization man, status-seeking man are not there; they left in the great migration. No one saw them leave, because they were bloodless and hence transparent. No one knew they left, because they do not have names. It is still one of the merits of Philosophy and the other Humanities that they see man with all his virtues and weaknesses including his first, middle, and last names.

IN THIS CENTURY OF TABULATION, when all men are reduced by some form of sublime taxonomy to divisions, subdivisions, and classes, one would suppose that the sense of membership, at least to a subsection of a subclass, would be stronger than at any other time since the Middle Ages. But except in the matter of whether or not one uses the short or long form of the Federal Income Tax this seems not to be the case. We are told constantly that modern man, to misquote Wordsworth, "wanders lonely as a crowd," because he is rootless, cultureless, and fatherless. If he has a sense of the past, he loathes it, because he has no sense of the future. He yearns to love or to hate, but he knows no person or thing well enough to practice either passion. All of this adds up to the fact that man severed from man lives in an undignified opposition to himself. It is at this stage of the predicament that the Humanities, which once enabled man to distinguish himself from those animals that lack conscious history and a written tradition, might help him out.

Those who believe in the Humanities are like all believers—they believe without cause. They cannot explain their belief; they simply cannot imagine any other subject of trust with so great an attraction as theirs. Like all affections, this one, too, requires no gilding; but those who have it are not likely to feel alone or to suppose that man is without worth.

It is not, I think, the purpose of the Humanities to supply the attributes of gentility, or to offer freedom in the capital meaning of that idea, or to teach either morality or prudence. Nor are they required as recently they have been to provide their advocates with the means of making value judgments—a contention that is in itself a misvaluation. Taste, I expect, is a talent; it can be developed and refined by the training that is offered in the Humanities, but it cannot be produced by it. The Humanities are at their best when they give man a sense of continuity and of worth, and this is all we should ask of them.

The fact that man has a history, consciously written and preserved, makes him at home in the world. The other animals have only a kind of history which consists of their instincts and habits, their sepulchral remains, and what man has put in the records about them. It must give them very little comfort and only a slight edge on the vegetables. But man can trace himself through his own writings and memorials for more than six thousand years. In the history of solar systems, this is a clock-tick; but in the history of any man of this generation, it is a long companionship. From these accounts we can learn that we are part of the course of life. If the record shows that we have not always done so well as we might, it also shows that we have often risen above ourselves. It is up to those of us who read this record to understand man's declines and ascents and to see our own rises and falls mirrored in them. It is up to modern man, too, to widen this mirror not only by his own actions but also by what he may recover from the past.

INDIVIDUAL MAN MAY FIND MORE than companionship and solace in the study of the Humanities. While he can follow the career of *man* (that great anonymous mass) as he invents wheels, sows grain, breeds cattle, controls the Nile, tempers iron, and invents the bow, he may find very little in all of this experience that he can share. But when individuals begin to emerge and name-signing begins, when men tell about themselves or others, the lonely man can recognize himself in some separate thought, in some feeling of triumph or loss, in some moment of weakness or strength. The fact that one finds his past self in an entry in history or autobiography, in a poem or a painting, in a character in fiction or a terse philosophical observation rescues him from the cold Himalaya of isolation or the cold percentile of mass unimportance and nonentity. A man is not and he has never been solitary; he has simply been unaware of his earlier existence. But there is probably another consolation in the Humanities than this. When we sense the past in ourselves and find among the memories of mankind flashes of sympathy, of likeness, of recognition, we should have an equal sense of the future and our share in it. This is, perhaps, the major lesson of modern *humanitas*, which informs us that no individual existence is without value, that no man need be alone.

SCIENCE

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the most rigorous restrictions upon mating and breeding.

WE MUST NOW RECOGNIZE that such a program of eugenics involves ethical considerations. Ethics has grown out of the evolution of man, but like man's intelligence and love of beauty, his moral qualities seem to transcend the immediate evolutionary advantage which called them forth. In fact, the tables are very nearly turned, since henceforth it may well be man's ethics, his intelligence, and his love of beauty that guide the course of evolution, rather than the opposite.

It is time, then, to take thought regarding the question of whether it is better to provide the diabetic with relative health and happiness and reproductive fertility, at the cost of the unborn generations of the future. To modify the effect of a particular defective gene does not constitute a cure, for the defective gene is still present, and in later generations its disability will again have to receive compensation. Some day we may learn how to cure defective genes and make them sound in action again, but that will require directing the mutation of harmful genes while not promoting the dysmutation of normal genes. It is still a scientist's dream, but we've made first steps toward it.

Nor, until we know more about such matters, can we safely undertake to "breed from the best," as some advocate, except in a very general way. Genetically, there is so much bad in the best of us, and so much good in the worst of us that we can scarcely select good genotypes for perpetuation. Sound health, high intelligence, general adaptability, integrity of character, and nobility of spirit we would like to see; but at least some of these are not simple hereditary traits, or even hereditary at all. This was brought out superbly by a onetime member of the department of biology at Johns Hopkins University, Alexander Weinstein, who wrote an essay on eugenics entitled *Palamedes*, from which I quote the conclusion:

I have been asked who Palamedes was and why this paper is entitled with his name. The question is a good illustration of my theme. Palamedes was the greatest of the Greeks who fought before Troy. He was a scientist and an engineer. He devised a system of writing and arithmetic computation. He traced the movements of the heavenly bodies and used them for marking the hours and for guidance in navigation. He fashioned weights and measures. He built the fortifications of the Greek camp. He even invented checkers and dice to keep the soldiers occupied when they were not fighting. Yet his name is unknown except to classical scholars, while every schoolboy is familiar with Agamemnon, who was only the titular commander-in-chief, and Achilles, who though brave and handsome was a good deal of a brute. And if anyone is asked who was the wisest of the Greeks, he will say Nestor or Odysseus. Nestor, however, was wise only in the sense that being very old he could remember many things; and Odysseus was not wise at all but merely unscrupulous. Palamedes and Odysseus once measured wits against each other when Palamedes had been sent to persuade Odysseus to come to the war. Odysseus, unwilling to go, feigned madness and ploughed with an ox and an ass yoked together; but Palamedes placed Odysseus' infant son, Telemachus, before the plough, and Odysseus swerved aside, showing he was not as mad as that. Odysseus accompanied the Greeks; but when he arrived before Troy he forged letters from the enemy, hid them in Palamedes' tent and accused him of treason. The letters were found, and Palamedes was stoned to death.

It may be said that this is not a fair parable; that Palamedes displayed a want of intelligence in allowing such a plot to succeed. If he could foretell the movements of the stars, why could he not foresee the actions of Odysseus? The objection might be valid if the men had been older, for with experience we learn what our fellows are like; but when we are young each interprets others by himself, since he attributes to others the impulses he himself feels. Odysseus gauged others correctly not because he was wise but because he was evil and it so happened that in this respect most men resembled him. In a better world it is Palamedes who would have been the better judge of men. If we are to make a better world, we must breed people like Palamedes; the danger is that we shall breed people like Odysseus instead.

EUGENICS is but one of the frontiers where scientific matters impinge on social relationships and where the choice of goals needs must involve values not to be weighed by strictly scientific means. Human life is now permeated with science, and the strength of every nation is recognized to rest upon its utilization of scientific knowledge and its scientific manpower. In education, the natural sciences will increasingly become the core of the liberal, as well as the specialized, curriculum.

In many ways, this is very good, since science has liberated humanity from much superstition and many fears of the once unknown and uncontrollable. Yet there is an alarming tendency on the part of the general population to regard not only the facts and concepts, but even the methods, of science, as generally unintelligible except to the elite. Highly intelligent humanists sometimes seem proud of their very ignorance of scientific concepts and ways of thinking; while to most Americans, I suppose, science is a modern magic in which Aladdin pushes a button instead of rubbing a lamp. C. P. Snow, the British novelist who because of his scientific training stands between what he calls the "two cultures," is frightened by the lack of communication between them. It may indeed lead to scientific tyranny or war.

Only education of the right sort can prevent this. The problem is to integrate the teaching of the sciences with the other liberal studies. On the one hand, it must be science-oriented, but with a far greater intent to reveal the true method and spirit of scientific inquiry to the non-scientific man or woman than merely to develop more and more specialists. We must remember that science is simultaneously social study and creative art, a history of ideas, a philosophy, and a supreme product of esthetic ingenuity.

On the other hand, the social studies and the humanities must draw closer to the natural sciences. The development of technology through the past four millenia, and of modern science through the past four centuries, are central themes of human history and should be treated as such. Mathematics has a close relation to music, biology to art. Communication in native or foreign languages is a common problem for scientist and non-scientist. The former so desperately needs to be able to express himself clearly and simply; the latter so desperately needs to understand the scientific ideas which a modern age must communicate. Most of all, we need a philosophy that will embrace the rights and needs of the individual as well as the welfare of society, a dynamic philosophy that will grow with man's scientific understanding of himself and his world. For we are not irrevocably tied to Newton or Einstein, Pavlov or Freud, Darwin or Mendel. All of these, however great, have seen through a glass darkly. The ultimate conception of nature and of man toward which we press is, like a vast and beautiful cathedral—a structure wherein the human spirit may find strength and courage, peace and wisdom.

For this purpose, science standing alone has clear limitations. It deals with matter and energy, space and form and time. Its questions are framed within a closed system, and its answers come back in terms of matter and energy, space and form and time. It reveals truths but perhaps never the whole of truth, being unable to measure values and being thwarted by intangibles. Nature and life are both subjective and objective, and our own primary experience is subjective, not objective. As Erwin Schrödinger has so well pointed out, there is all the difference in the world between the yellow of the physicist—a particular wave-length of the spectrum of radiant energy—and the yellow that is a color in the mind and which one cannot communicate to a congenitally blind or totally color-blind person. Yet the public world of scientific experience and the personal world of the individual mind relate to one another—and no man is complete without both.

Those who have absorbed the spirit of the natural sciences and the humanities alike have in this generation a great privilege and an even greater responsibility. The schizophrenia in our culture must be healed. "1984" is very close, almost as imminent as nuclear disaster. The instrument and the spirit must be wedded, as they were in Leonardo's fusion of scientific investigation and artistic endeavor, which marked the supreme achievement of the Renaissance. We need new Leonardos. They will arise, however, only in the presence of a widely diffused intellectual climate like that of the Renaissance, when a boundless curiosity for seeking out the ways of nature was permeated with the spirit of humanism—the quest for the whole man.

ENGINEERING

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mark of our industrial genius and our growing economy. And beneath the adjectives, we are all quite right. But when we go a step further, as we always do, and call this change progress, I'm skeptical. Calling change progress does not make change an unmixed blessing.

I certainly am not saying there has not been immeasurable progress—only that change is not always an unmixed blessing.

In medicine, for example, there has been incredible progress. Medical science has changed more since World War II than in the preceding fifty years, and medical progress in the past century has been greater than in all previous centuries. But even here, as we've seen recently, the fantastic rate of change in the production of drugs has created serious problems for the physician. In almost every area of endeavor, we have seen great progress, but we have also seen immense problems created by the rate of change.

Much of what I have said is not new, but it is, nevertheless, interesting in the context of the Johns Hopkins School of Engineering and its students. Once the question of what should be taught to engineering students was easily answered: technology. The student was exposed to the technology of heat engines, electric machinery, chemical processes, sanitation, and manufacturing and construction materials. When he was graduated, he was likely to meet these same technologies in his work, and thus be on familiar ground. Not so, anymore. The rate of change doubles and redoubles; what there is to know rises in geometric progression. The technology of today is obsolete tomorrow.

PARTLY IN RECOGNITION OF THIS, engineering schools such as this one have turned toward fundamentals, toward the verities of mathematics, physics, chemistry, and engineering science in hope that the graduate who is trained well in basic science will be capable of adapting to the rapidity of change he will find in the world. Technology has virtually disappeared from our curricula and technologists—of which I am one—are rapidly disappearing from our faculties, their specialized capabilities rendered obsolete by rapid change.

This particular adaptation for survival, the creation of more fundamental curricula, may work—but one cannot be sure. Just as technological change has accelerated, so has the rate of discovery in all fields of science. "Classical physics" is coming to have the same antiquarian connotation as "classical Greek," as the science divides into particle physics, solid state physics, theoretical physics, high energy physics, and so on. Again, the amount there is to know is rising exponentially with time, and it may well be that physicists, along with engineering technologists, will find themselves obsolete victims of a too-rapid rate of change.

Not only has the rate of change yielded more things to know, it has raised formidable communications barriers. The weaver whose handicraft skill was made obsolete by the power loom may have been displaced or degraded to the company of child labor, but at least he understood his machine and its workings. The clerk who punches cards or tape as input to a computer today is not likely to understand the machine at all and will, moreover, be unable to communicate on the subject with those who do. The machine, like the atom, is simply unknowable to many people. There is nothing new about this fact—people drive cars who do not understand the gasoline engine—but increasingly society seems to be divided into two groups: those who comprehend the kind of world we live in and those who do not. And the latter increasingly outnumber the former.

ENTANGLED in a complex web of interacting relationships, there are non-technological changes as well, which may have grave consequences for the human race. These are the social, moral, and spiritual developments of our age, and the problem is not the rapidity with which they change, but conversely with the relative slowness of their evolution.

In this era of hydrogen bombs, ICBM's, chemical and biological warfare, it is our attitude toward war that is obsolete. Until our moral and mental development equals our technological efficiency, we will live in the shadow of disaster. Medical science continues to increase the human life span, adding to the staggering population growth—a problem which much of the world meets with inadequate economic theories, superstition, and apathy. A technologically shrunken world brings freedom into focus for masses of exploited peoples whose "benevolent rulers" wield clubs of decadent political theories.

This is the nature of change and the rate of change, and it has particular relevance to the Class of 1960. They are inexorably caught by the "second derivative." And their response to the challenge it presents will determine their futures and may affect the destiny of society.

My hope is that the students of today, this class, will provide John Morley's wise men "who foresee what time is thus bringing, and endeavor to shape institutions and to mold men's thought and purpose in accordance with the change that is silently surrounding them."

Don Cameron Allen is Sir William Osler professor of English literature
H. Bentley Glass is professor of biology
Robert H. Roy is professor of industrial engineering

THOUGH he bears little resemblance to St. George, Jefferson M. Hamilton, Jr., has faced a good many of the "dragons" of modern living. As an Educated Man (B.A. '40, PH.D. '44, chemistry), as a Corporation Official (a technical supervisor for Du Pont), as a Family Man (a wife, Jane, Goucher; a son, Ogden, fourteen; a daughter, Elizabeth, ten), as a one-time Public Servant (an associate with the Manhattan Project from 1942 to 1946), Dr. Hamilton has met most of the problems still to be faced by the members of the Class of '60.

OPEN LETTER TO THE CLASS OF '60

DISCOURSE ON DRAGONS

An alumnus writes of the Life of The Educated Man

By JEFFERSON M. HAMILTON, JR.

I don't have time for everything in the present,
let alone the past. But every now and then,
I wander into Elizabeth's doll house
in the basement and browse old copies of magazines
or leaf through musty copies of The Bluejay, which
I edited as an undergraduate a couple of
centuries ago. Sometimes I just sit.

Imaginary dragons roar as loudly as the real ones

THROUGHOUT YOUR LIVES, well-meaning elders (parents, teachers, counselors) have been handing out unlimited advice. Well-intended it may be, but by now you are probably fed to the gills. And so, when it all reaches a climax at your commencement address, who's to blame you for curling up with the first cliché and letting the rest of the words go by?

Knowing this, I've limited myself to describing my own experiences and reactions during the twenty years since I was a senior at Johns Hopkins. The picture is valid for much of my generation—and it may hold true for this senior class, too. And if you take it as advice, the choice is yours.

My story is concerned with what might be called "The Educated Man." Since most of my life has been played on a parochial stage, this will be largely personal. I had no solutions to the world crises of twenty years ago. I have none now. My one venture into world affairs ended with the dropping of an atomic bomb on Hiroshima. Since then I have been a non-participant—albeit a deeply concerned one.

On a personal level in 1940, I had no real idea of what lay ahead of me. I know now, however, that the dragons I girded against as a senior were seldom the ones I later confronted. I've also discovered that imaginary dragons (and their keepers) roar so loudly as to divert your attention from the real ones. Let's look at a couple.

Suburbia: the toothless dragon

SOCIAL CRITICS—Whyte, Packard, Keats—would have you believe that one of your most formidable dragons is named Suburbia. They see thousands of palpitating egos pinned beneath the split levels. They diagnose the feverish and often senseless activity of Suburbia as a mass hysteria aimed at perfecting status symbols.

This is topnotch huckstering, but poor analysis. Too much suburban effort is expended on projects which never become public: obscure reconstructions in the bowels of the house, or multiple shrub transplantings that even the homeowner loses track of. Here is no striving for status symbols, but simply an inborn drive—a sort of Uncontrolled Nesting Instinct. Like the robin, man has an innate urge to provide shelter for his young. Having done this, the suburban male, with the peculiar illogic of his species, simply continues to perfect his nest long after any reasonable limit is past. Wasteful, perhaps, but scarcely worse than playing bridge or watching quiz shows.

And what of the other warning—that Suburbia is a malignant social vise, crushing individuals into neat, spherical conformity? The conformity is certainly there, but again the interpretation is faulty. The real answer is simply that the inhabitants are up to their necks in identical problems of family, finances, and householding. Like any immersed group, the bobbing heads look pretty much alike.

Owning a home and caring for it gives me a feeling of accomplishment and satisfaction. I'm aware that, under the social critic's microscope, my behavior marks me as a Suburbanite. For a while, I expected to break out in spots or something. But I didn't—even after I got a station wagon.

I'll admit that I sometimes resent fertilizing the trees or digging drainage ditches, but only because it takes valuable time. It's worth it, though, and Ogden is a big help now.

Actually, as communities go, Suburbia is quite tolerant, if only because the people are busy with their own affairs. The only mortal offenses are depreciating the property values or creating a public nuisance. Avoid these and you can indulge with impunity in butterfly chasing, Zen, or even voting Democratic.

Does Suburbia represent a new social failure—something peculiar to this period of history? I think not. The critical social scientist, that child of the Enlightenment, expected something unique from a community of The Educated Man. Now he is annoyed that most of us, like every other middle class, find the responsibilities and mechanics of family life forcing our horizons fairly close to home.

I used to think people had to guard against "conformity." I discovered that for the most part it's just doing what you want to do with people who want to do the same things. Regularly, my neighbors and I lay down our rakes and gather at somebody's home for a pre-dinner drink.

DUPONT

I happen to work for The Big Corporation (often pronounced like "The Big Bad Wolf"). Sometimes I wish I were a professor—but then sometimes I wish I were a musician, a writer, or an international playboy. But my job takes all my talents and a little more.

I've got an ulcer's worth of responsibility in my job, but that is about the way I want it. On the way home, I drive through Bringhurst Woods. This is my decompression chamber; by the time I come out at the other end, I'm partly relaxed and ready for home.

The Big Corporation: a goat dressed like a dragon

THE BIG CORPORATION isn't a real dragon; it's a goat—a scapegoat. In an Orwell-omened society it has become symbolic, together with the conclusion that oppression is directly related to size. Actually, the most important point here is that you are still free to make a very old and very simple choice—you can either work for yourself or for somebody else.

A large corporation obviously has its advantages and disadvantages—these have been discussed through thousands of pages of rhetoric. My own experience has been the happy one of discovering that, at least in my sphere, the corporate entity is far less interested in quirks of personality than in whether the job gets done right.

I might well have chosen the college campus or the market place. Instead I chose a large corporation. It offers a challenging and responsible job that takes all my talents and a little more—and I can save my gray flannel suit to wear to weddings and funerals.

Necessary Trivia will devour you

BUT IF THE MONSTERS of Suburbia and the Big Corporation are just shadows of dragons, what is the real thing? What must we beware of? The answer is Time—time to do the things you *have* to do, and time to do the things you *want* to do and *ought* to do because you are The Educated Man.

Ever since Adam, man has been running out of time, but modern living seems to add a new and complicating dimension. Today we are overwhelmed with the Necessary Trivia. Just getting back and forth to work over clogged streets eats up valuable time. Then there is the blight of homeownership: the uncountable things around the house that have to be done. This is not simply a matter of cutting grass, trimming the hedge, taking out the trash. This is reflooring the game room at midnight, moving twenty-six tons of topsoil, or wrestling a chainsaw at the back of your lot. Add dental appointments and shopping trips and chauffeuring the children.

The Necessary Trivia consume you. They even force you to forego articles and lectures by well-meaning jackasses on "Creative Use of Leisure Time." The things you want to do must be squeezed in where they'll fit. If you like to read, you'll sandwich it in around breakfast, in the bathtub, or late at night when you should be sleeping. A few years back, I satisfied a long-standing urge: I bought a piano and learned to play it. But now I can't find the time to stay in practice. Whenever I extend myself to learn a new tune, I forget one of the old ones. A victim of Time and the Modern World, I seem permanently damned to a repertoire of six pieces.

I guess my most annoying problem is finding time for all the things I have to do. Many of them are little things, like chauffeuring Ogden and his date to the dance and hamburger joint—not unpleasant things, just so darned time consuming.

I make problems for myself. I've started a project to raise every tree native to Delaware. Since then, I've learned we have fourteen varieties of oak alone, and suddenly I've realized that I'll have tons of leaves to rake.

In the city, grass pushes up through the cracks in the sidewalks. But in Suburbia, it must be bought in bags and be cultivated. This is just another of the Necessary Trivia, which are constantly plaguing me.

I'm most oppressed by having to squeeze the things I want to do into the time left over from doing the Necessary Trivia. Elizabeth is at the age when she is eager to broaden her horizons, and I like to help.

Jane and I teach Church School. It's one of those things we ought to do and enjoy as well. I know that I, as "The Educated Man," should take an active interest in worthy projects, but there are so many worthy projects and I can't help feeling swamped.

Like a persistent pup, my job keeps following me home. Much as I like my work and want to succeed in my career, I get tired of the nightly ritual. I am consoled by the thought that if I weren't doing this, I'd be reflooring the game room or something.

You will face a many-headed Hydra

NEVER FORGET IT: You are The Educated Man. As such, you have responsibilities to yourself and to others. However, you operate in a world governed by Parkinson's Law: where one committee was, ten now stand. You are expected to be in the PTA, half a dozen professional societies, a couple of social clubs, several church groups, the Cub Scouts, and the Symphony Association. Beyond this, you must be ready to handle the local drives for various charities, serve on the school board or its committees, meet with councils for slum clearance, and coach in the Little League.

Worthy activities. You are simply taking on your legitimate responsibilities as The Educated Man.

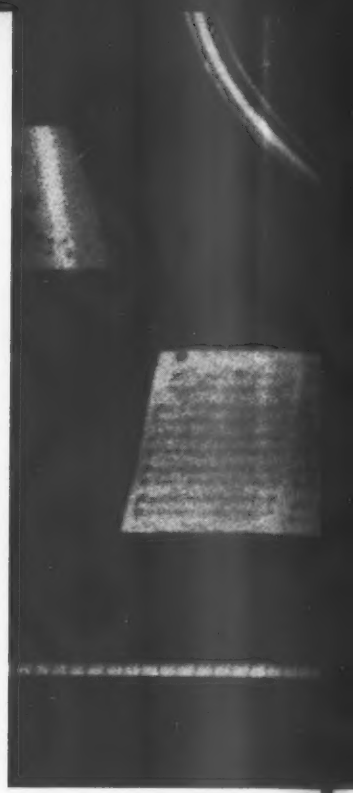
To succeed in your career, you will have to keep up with the latest developments in your field, as reported in its journals. You will bring home work at night, and there will be a fair number of weekends that will see you back at the office.

Along the way, if you got your money's worth at Johns Hopkins, you will be constantly trying to push back those horizons I spoke of. As a matter of fact, you may find that you've caught Curiosity at college and can't shake it off. There is no limit to the books to be read, the music to be heard, the ideas to be explored. There are a half-dozen magazine subscriptions yielding fat and fruitful issues faster than you can carry them to the basement.

Every new experience will pull you like a magnet into some new time-consuming interest. A business trip to South America led me into the intriguing hobby of comparing the idioms of various languages, and this is growing into at least a dilettante's interest in philology (which will have to be fitted into the twenty-fifth hour of the day). And I keep trying to stretch my piano repertoire to seven pieces.

I wouldn't mind being reincarnated as a pianist. I bought this after years of suppressed desire and taught myself to play. But my joy is incomplete; I haven't time to practice, and when I extend myself to learn a new tune, I forget an old one. I seem eternally damned to a repertoire of six pieces.

Photographed for The Johns Hopkins Magazine
by Erich Hartmann, Magnum



You'd really have to be five men to win the battle

YOU CAN'T BEAT TIME. Your only answer is compromise—learning to pick and choose among family and friends, profession and service, reading and gardening, working and resting. Every time you choose more of one, you have to give up some of another.

This isn't new to you, of course. When you choose your career, you close half the doors that were open to you; if you marry, you close half the rest. A hundred more must be ignored just to give your life direction and continuity, and another score lest you jeopardize the security of your family.

Since your education has broadened the scope of your interests, it will bring a dozen beguiling, half-opened doors into view every year—tempting possibilities against the necessities of an already overcrowded life. Doors to be entered or slammed shut.

And what kind of help will you have in making these choices—in this stewardship of Time? Well, you do have the tremendous advantage of being trained to clarify the issues before you make your decision. But as for the decision itself, you, The Educated Man, may discover with a shock that the final basis for a value judgment is never really logical. Inevitably, it is tied up with the way you look at your life. The ultimate concern may be self-interest, love, human progress—any one of a hundred sets of values (or, in religious terms, faith structures). But although you may approach the choice with logic, and carry it out with common sense, the actual leap is your own personal, peculiar decision.

And are these decisions important? You bet they are. Every time you close a door, you take on a more definite shape, and after ten or fifteen years, you'll discover that you've just about settled who you are and what you can become. You will still find new interests, new challenges, maybe new adventures—but you'll meet them with a personality and outlook that are pretty well defined.

Does this sound like an absurd and gloomy routine—making decisions and closing doors? Well it's not, because it's here that the fun comes in—the conscious living of a life, the joys and disappointments, the successes and failures that make it real. The only men I feel sorry for are the jokers who never see the real point of the thing, who just let the doors swing shut behind them until they reach the one labeled "No Exit." As for myself, I find it's exciting to work the thing out. I think you will, too.

I think the hardest lesson I've had to learn is that a man must make decisive choices—close doors which limit future opportunities. Perhaps the most significant such decision is whether to get married and have a family, for this choice affects all the rest you make. Occasionally, I wonder what it might be like to be completely independent and free of domestic responsibility, but I always come to the same conclusion: it's my family that makes the struggle worthwhile and gives me the inspiration I need. I would never trade what I have for what I've passed up.

A Johns Hopkins Gazette

AN UNOFFICIAL COMPENDIUM OF FACULTY AND ALUMNI APPOINTMENTS, HONORS, AND ACCOMPLISHMENTS

THE FACULTY

In the Faculty of Philosophy, Charles R. Anderson, Caroline Donovan professor of English literature, was visiting professor of American literature at the University of Torino for the second term. He has also been appointed to the editorial board of the magazine *American Literature*.

George Boas, professor emeritus of philosophy, has been elected to the fine arts section of the Royal Academy of Belgium.

Gerhard H. Dieke, professor of physics, was visiting professor of physics at the Sorbonne for the second term.

Ernst Feise, professor emeritus of German, was lecturer in German for the second term.

John Jewkes of Merton College, Oxford, has been appointed honorary professor of political economy.

Fritz Machlup, professor of political economy, has been elected president of the Southern Economic Association.

Maurice H. Mandelbaum, professor and chairman of the department of philosophy, has been named the third annual Bishop John F. Hurst Philosophy Lecturer at American University in Washington.

Elmer V. McCollum, LL.D. '51 (hon.), professor emeritus of biochemistry, has received the 1960 Distinguished Achievement Award from *Modern Medicine Magazine*.

William D. McElroy, director of the McCollum-Pratt Institute and chairman of the department of biology, has been elected president of the Society of General Physiologists.

Alvin Nason, associate director of the McCollum-Pratt Institute and professor of biology, has been appointed editor of the new journal *Analytical Biochemistry*.

Donald W. Pritchard, professor of oceanography and director of the Chesapeake Bay Institute, has been appointed to the Board of Natural Resources of Maryland.

Lindsay Rogers, B.A. '12, PH.D. '15 (political science), LL.D. '48 (hon.), Burgess professor of public law and head of the department of public law and government at Columbia University, was visiting professor of political science for the second term.

At the School of Medicine, Philip Bard, professor and director of the department of physiology, has been elected president of the Society for Experimental Biology and Medicine.

Edwin N. Broyles, M.D. '19, associate professor of laryngology and otology, has been presented a citation of merit by the U. S. Navy.

James R. Cantrell, B.A. '44, M.D. '46, associate professor of surgery, has become director of surgery at King County Hospital and professor of surgery at the University of Washington.

John Eager Howard, M.D. '28, associate professor of medicine, has been elected president of the Endocrine Society.

George S. Mirick, M.D. '35, house staff '35–'36, associate professor of medicine, has become professor of medicine at New York University and director of the Council for Medical Research for New York City.

Richard L. Riley, associate professor of medicine and environmental medicine, has been elected president of the newly-formed Maryland Trudeau Society, a medical affiliate of the National Tuberculosis Association.

Owsei Temkin, William H. Welch professor of the history of medicine, has been elected president of the American Association for the History of Medicine.

Samuel P. Asper, JR., M.D. '40, associate professor of medicine and associate dean of the School; David Bodian, professor and director of the department of anatomy; Carlo Bruni, instructor in surgery; Francis P. Chinard, arts '34–'36, M.D. '41, associate professor of medicine and physiological chemistry; and Anthony J. de Lorenzo, M.A. '50 (psychology), assistant professor of laryngology, otology, and anatomy, have been elected fellows of the New York Academy of Sciences.

DR. BLALOCK HONORED

Alfred Blalock, professor and chairman of the department of surgery and surgeon-in-chief of the Hospital, was presented the Distinguished Service Award by the Johns Hopkins Hospital at a banquet in his honor last month at which 425 colleagues, friends, and former staff members gathered to pay tribute to his accomplishments in medicine. Dr. Blalock is known primarily for his development of the "blue baby" operation and for his work in the entire field of cardiac surgery. Dr. Blalock also played a major part in establishing the modern concept of surgical shock and its treatment. From his findings, the administering of plasma and transfusions, which had been used sparingly, became widespread.

Leo Kanner, professor emeritus of child psychiatry, was visiting professor of psychiatry at the University of Minnesota for the 1959–60 academic year.

Werner A. Kohlmeyer, instructor in psychiatry, is on a two-years' leave of absence to serve as professor of psychiatry at Vellore Christian Medical College in Vellore, South India.

Albert I. Mendeloff, associate professor of medicine, has been elected president of the American Federation for Clinical Research.

At the School of Hygiene and Public Health, Dietrich Bodenstein, lecturer in pathobiology, has become chairman of the department of biology at the University of Virginia.

David E. Davis, associate professor of pathobiology and assistant dean of the School, has become professor of zoology at Pennsylvania State University.

Ruth Freeman, associate professor of public health administration, has been elected president of the National Health Council.

Paul F. Guerin, lecturer in public health administration, has been appointed director of laboratories at Franklin Square Hospital in Baltimore.

William B. Looney has been appointed assistant professor of radiobiology.

Russell H. Morgan, professor of radiology at the School of Medicine, has also become professor of radiation hygiene.

Kunio Okuda has been promoted to the rank of assistant professor of biochemistry.

Richard H. Shepard, M.D. '46, associate professor of environmental medicine (and assistant professor of medicine), has been elected a fellow of the New York Academy of Sciences.

Ernest L. Stebbins, dean of the School, has been elected president of both the American Board of Preventive Medicine and the National Citizens Commission of the World Health Organization.

Gerald Wiener, formerly chief psychologist at the Rosewood State Training School, has been appointed assistant professor of public health administration.

At the School of Advanced International Studies, John Palen Powelson, professor of economic development, was on leave for the second term to serve as economic adviser to the government of Bolivia.

Richard W. Sterling, research associate, has been appointed associate professor of government at Dartmouth College.

At the Applied Physics Laboratory, Ralph E. Gibson, director, has received the Captain Robert Dexter Conrad Award from the Office of Naval Research.

William H. Guier, senior staff, has been named outstanding young scientist of 1959 by the Maryland Academy of Sciences.

Frank T. McClure, principal staff, has been awarded a fellowship by the Carnegie Institution of Washington.

Angus C. Tregidga, principal staff, has been appointed assistant to the director.

The following members of the senior staff have been promoted to the principal professional staff: Frank J. Adrian, Ralph W. Blevins, Theodore C. Cheston, Fred H. Esch, Robert M. Fristrom, James L. Keirsey, George W. Luke, jr., Oscar M. Martin, Eugene L. Nooker, David W. Rabenhorst, Lauren J. Rueger, Woodrow Seamone, Charles J. Smith, jr., John L. Vanderslice, and Lawrence J. Viernstein. Mr. Nooker has also received the Navy Distinguished Public Service Award for his contributions to the field of scientific research and development.

Among the Members of the Boards of Trustees, Thomas M. Bancroft, Hospital trustee, has been elected to the board of directors of the Western Electric Company.

Detlev W. Bronk, president '49–'53, University trustee, has been honored by the Society for Promoting International Scientific Relationships for his fostering of scientific research.

David K. E. Bruce, University trustee, has retired from his post of U.S. Ambassador to the Federal Republic of Germany.

M. Jenkins Cromwell, b.a. '23, and Albert D. Hutzler, sr., b.a. '09, University trustees, have been honored by the National Conference of Christians and Jews for their community service.

Robert D. H. Harvey, b.s. '53, University trustee, has been elected vice-chairman of the board and a director of the Baltimore National Bank.

Devereux C. Josephs, University trustee, has been elected president of the Harvard University Board of Overseers.

Robert H. Levi, b.s. '36, Hospital trustee, has been elected director of the Savings Bank of Baltimore.

Hooper S. Miles, Hospital trustee, has been elected chairman of the board and chief executive officer of the Baltimore National Bank.

Carrol M. Shanks, University trustee, has been elected Protestant national co-chairman of the National Conference of Christians and Jews.

Gary Black, Wm. Purnell Hall, b.a. '30, and Thomas S. Nichols, University trustees; Beverly H. Mercer, Hospital trustee; and D. Luke Hopkins, University and Hospital trustee, have been elected directors of the Baltimore National Bank.

M. Jenkins Cromwell, b.a. '23, and Blanchard Randall, b.a. '14, g. '14–'15 (civil engineering), University trustees; and Carlyle Barton, b.a. '06, ll.d. '58 (hon.), and Howard Bruce, trustees emeritus, have been named advisory directors of the Baltimore National Bank.

BOOKS

Charles R. Anderson, Caroline Donovan professor of English literature: *Stairway of Surprise: The Achievement of Emily Dickinson* (Henry Holt).

T. S. Ashton, fac. '51–'52 (political economy): *Economic Fluctuations in England, 1700–1800* (Oxford, $3.40).

John B. Blake, fellow '51–'52 (history of medicine): *Public Health in the Town of Boston, 1630–1822* (Harvard, $6.50).

Robert K. Brown, b.s. '52: *Public Housing in Action: The Record of Pittsburgh* (Pittsburgh, $3).

George E. Cartwright, m.d. '43, fac. '44, house staff '43–'44 (medicine): *Diagnostic Laboratory Hematology* (Grune and Stratton, $6.75).

Charles E. Clark, fac. '53–'57 (oro), and Betty Weber (Mrs. Eugene) Holz, staff member (oro): *Exponentially Distributed Random Numbers* (Johns Hopkins, $6.50).

C. Wythe Cooke, b.a. '08, ph.d. '12 (geology): *Cenozoic Echinoids of Eastern United States* (U. S. Government Printing Office, $3).

Albert W. Dowling, fac. '46–'50 (McCoy): *On Chesapeake Shores* (Dietz, $3).

Grose Evans, ph.d. '53 (art): *Benjamin West and the Taste of His Times* (Southern Illinois, $22.50).

Herbert McL. Evans, m.d. '08, sc.d. '57 (hon.), fac. '08–'15 (anatomy), editor: *Men and Moments in the History of Science* (University of Washington, Seattle; $4.50).

Rashi Fein, b.a. '48, ph.d. '56 (political economy): *The Economics of Mental Illness* (Basic Books, $3).

Richard H. Foote, sc.d. '52 (hygiene), and David R. Cook: *Mosquitoes of Medical Importance* (U. S. Department of Agriculture).

Bentley Glass, professor of biology: *Science and Liberal Education* (Louisiana State, $3).

Alan F. Guttmacher, b.a. '19, m.d. '23, fac. '23–'24, '26–'52 (medicine), house staff '25–'29 (obstetrics): *Babies by Choice or by Chance* (Doubleday, $3.95).

Paul D. Hoeprich, fac. '56 (medicine, epidemiology), and John R. Ward: *The Fluids of Parenteral Body Cavities* (Grune and Stratton, $4.75).

Herbert P. Houghton, ph.d. '07 (Greek):

Arthur E. Raymond, Senior Engineering Vice President of Douglas, goes over new space objectives that will be made possible by nuclear propulsion with Elmer Wheaton, Engineering Vice President, Missiles and Space Systems.

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An Introduction to Basque and *The Coptic Verb* (E. J. Brill, Leiden).

LEON HOWARD, PH.D. '29 (English): *Literature and the American Tradition* (Doubleday, $4.50).

PHILIP C. JESSUP, fac. '34–'35 (political science), and Howard J. Taubenfeld: *Controls for Outer Space and the Antarctic Analogy* (Columbia, $6).

HERMAN KIEVAL, B.A. '39: *The High Holy Days* (Burning Bush, $5).

I. NEWTON KUGELMASS, PH.D. '21 (chemistry), editor: *American Lectures in Living Chemistry* (Charles C. Thomas).

I. NEWTON KUGELMASS, PH.D. '21 (chemistry): *Biochemistry of Blood in Health and Disease* (Charles C Thomas, $15.75); and *Complete Child Care in Body and Mind* (Twayne, $6.95).

KEMP MALONE, Caroline Donovan professor emeritus of English, editor: *Bede's Ecclesiastical History* (Johns Hopkins, $91, leather; $80, paper).

J. RUSSELL MATHER, PH.D. '51 (geography), and H. Hacia: *Investigations of the Heat and Water Balance at Centerton, New Jersey, May–July, 1959* (C. W. Thornthwaite Associates, $2.50).

FRANZ H. MAUTNER, fac. '38–'39 (comparative literature), and Henry Hatfield: *The Lichtenberg Reader* (Beacon Press).

W. JAMES MAYO-WELLS, fac. '46–'56 (APL), and Perry A. Borden: *Telemetering Systems* (Reinhold; Chapman and Hall, $8.50).

VICTOR A. MCKUSICK, M.D. '46, associate professor of medicine and assistant professor of epidemiology: *Vererbbare Störungen Des Bindegewebes* (Georg Thieme Verlag).

MALCOLM MOOS, professor of political science, and STEPHEN HESS, B.A. '53, G. '53–'55 (political science): *Hats in the Ring: The Making of Presidential Candidates* (Alfred A. Knopf).

ROBERT F. PITTS, PH.D. '32 (zoology): *The Physiological Basis of Diuretic Therapy* (Thomas, $9.75).

KEATS A. PULLEN, JR., DR.ENG. '46: *Conductance Curve Design Manual* (John F. Rider, $4.25); and *Conductance Design of Active Circuits* (John F. Rider, $9.95).

MARVIN C. ROSS, fac. '48–'49 (art), editor: *George Catlin: Episodes from "Life among the Indians" and "Last Rambles"* (Oklahoma, $12.50).

DONALD S. ROTHCHILD, PH.D. '58 (political science): *Toward Unity in Africa* (Public Affairs).

HERBERT W. SCHNEIDER, fac. '48–'49 (philosophy): *The Puritan Mind* (Michigan, $1.85).

ERNEST L. STEBBINS, M.P.H. '32, professor of public health administration and dean of the School of Hygiene, and HARRY S. MUSTARD, fac. '32–'37, '53–'54 (public health administration): *An Introduction to Public Health* (Macmillan, $4.50).

HAROLD J. STEWART, B.A. '15, M.D. '19, M.A. '23 (medicine), and Frank Glenn: *Mitral Valvulotomy* (Charles C. Thomas).

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EDWARD S. TAUBER, M.D. '34, fac. '35–'36, house staff '34–'36 (private wards, psychiatry), and Maurice R. Green: *Prelogical Experience* (Basic Books).

C. WARREN THORNTHWAITE, fac. '47–'54 (geography, climatology), W. J. Superior, F. K. Hare, and K. R. Ono: *Measurement of Vertical Winds in Typical Terrain* (C. W. Thornthwaite Associates, $4).

C. WARREN THORNTHWAITE, fac. '47–'54 (geography, climatology), and J. RUSSELL MATHER, PH.D. '51 (geography): *Investigation of the Climatic and Hydrologic Factors Affecting the Redistribution of Strontium-90 in the Soil* (C. W. Thornthwaite Associates, $3).

LAWRENCE C. WROTH, B.A. '05: *Abel Buell of Connecticut* (Connecticut Wesleyan, $5).

DEATHS

JOHN WHITE, B.A. '88, PH.D. '91 (chemistry), fellow '93–'94; on November 4, 1959. He had been a member of the faculty and board of managers of the Rose Polytechnic Institute in Terre Haute, Ind.

ROSS GRANVILLE HARRISON, B.A. '89, PH.D. '94 (zoology), LL.D. '42 (hon.), fac. '96–'07 (anatomy); on September 30, 1959. Dr. Harrison was Sterling professor emeritus of biology and the retired director of the Osborn Zoological Laboratory at Yale University and had been chairman of the National Research Council. He was a pioneer in the embryonic transplantation and culture of animal tissue outside the organism and developed a technique of tissue culture that led to the method used in creating polio vaccine.

ALBERT C. CREHORE, G. '90–'91 (electrical engineering); on January 15, 1959. Before his retirement, he was a research physicist at Nela Research Laboratory in Cleveland.

ARTHUR ST. CHARLES DUNSTAN, G. '91–'92 (physics); on August 5, 1959. Before his retirement, he had been professor of electrical engineering at Alabama Polytechnic Institute.

AMBROSE P. WINSTON, G. '91–'92 (political economy); on December 4, 1959. Before his retirement, he was professor of business administration at the University of Texas.

JOHN H. J. UPHAM, house staff '94–'96 (gynecology); on January 29, 1960. He was dean of the faculty of the college of medicine at Ohio State University until 1941.

EDWARD S. SMITH, G. '95–'98 (chemistry); on November 18, 1959. He was living in Boulder, Colo.

LAURENCE F. SCHMECKEBIER, B.A. '96, PH.D. '99 (history); on November 2, 1959. Dr. Schmeckebier was an expert on the District of Columbia government and was on the staff of the Brookings Institution in Washington before his retirement.

GEORGE L. ALTVATER, arts '97–'98; on January 14, 1958. He was living in Baltimore.

ALEXANDER GORDON, B.A. '98; on December 7, 1959. Before his retirement, he was a stockbroker in Baltimore.

MEADE B. MACBRYDE, G. '98–'99 (his-

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tory); on July 23, 1959. He was a retired Protestant clergyman.

SAMUEL A. MITCHELL, PH.D. '98 (astronomy); on February 22, 1960. Dr. Mitchell was the former director of the Leander McCormick Observatory at the University of Virginia and was a leading authority on solar eclipses.

EDWIN A. SPILMAN, B.A. '99, G. '99–'00 (Greek); on November 27, 1959. Before his retirement, he was chairman of the board of the Central Savings Bank in Baltimore.

ARTHUR L. FISHER, M.D. '00, house staff '00–'01 (medicine); on September 12, 1959. He was clinical professor emeritus of orthopedic surgery at Stanford University.

ROBERT C. HORN, G. '00–'01 (English); on May 31, 1959. He was dean emeritus of Muhlenberg College.

RICHARD F. RAND, M.D. '00, house staff '00–'01 (medicine); on January 18, 1960. He was clinical professor emeritus of gynecology and obstetrics at Yale Medical School.

ANDREW R. BIRD, B.A. '01; on November 19, 1959. Before his retirement, he was pastor of the Presbyterian Church of the Pilgrims in Washington, D. C.

T. WOOD CLARKE, M.D. '02, house staff '02–'03 (medicine); on December 17, 1959. He was a physician and historian.

SARAH FOSTER MERRILL (MRS. CHARLES K.) WINNE, graduate nurse '02; on November 1, 1959. She was living in Albany, N. Y.

JOHN ROBERT CARR, M.D. '04, house staff '04–'06 (medicine, surgery); on May 17, 1959. He was living in Butner, N. C.

EDITH SMITH (MRS. NORMAN O.) NELSON, graduate nurse '05; on November 2, 1959. She was living in Orlando, Fla.

WILLIAM W. DAVISON, G. '06–'07 (mathematics); on September 7, 1959. He was a retired official of the Georgia Power Company.

CLARENCE A. JOHNSON, medicine '06–'08; on August 27, 1959. He was a retired physician in Los Angeles.

CHARLES C. KNOWLTON, medicine '06–'08; on November 23, 1959. He was past-president of the Hancock County (Me.) Medical Society.

MARGARETTA F. TURNER, graduate nurse '06; on February 18, 1960. She had been chief nurse in surgery with the late Dr. Harvey Cushing at the Johns Hopkins Hospital.

PAUL H. ZINKHAN, B.A. '06; on September 4, 1959. He was a surgeon in Ravenna, Ohio.

JOHN A. ANDERSON, PH.D. '07, fellow '07–'08 (physics), fac. '08–'16 (astronomy); on December 2, 1959. Dr. Anderson was an authority on optics, spectroscopy, and seismology and supervised the construction of the 200-inch Hale telescope at Mount Palomar, Calif.

CALEB GUYER KELLY, B.A. '08, PH.D. '15 (history); on January 11, 1960. He was a Methodist missionary.

SAMUEL C. CHEW, B.A. '09, PH.D. '13 (English), LITT.D. '50 (hon.); on January 15, 1960. Dr. Chew was an authority on nineteenth-century English literature and was Mary E. Garrett alumnae professor of English literature at Bryn Mawr College.

LEROY K. HILL, arts '10–'11; on January 12, 1960. He was living in Towson, Md.

ANDREW H. KRUG, PH.D. '10 (English), fellow '10–'14; on February 1, 1960. He had been an educator in Baltimore schools.

MARY V. ADAMS, graduate nurse '11; on January 12, 1960. She was living in Hanover, Ontario.

BENJAMIN TAPPAN, SR., B.A. '11, M.D. '15, staff '29–'37, '41–'45, '47–'56; on November 30, 1959. He was a retired pediatrician.

CHARLES A. WELCH, medicine '11–'13; on October 21, 1959. He was a resident of Hartford, Conn.

JOSEPH ROBINSON INGRAM, G. '12–'13 (chemistry); on September 16, 1958. He was living in Nitro, W. Va.

WILLIAM L. MILLEA, M.D. '12, fac. '13–'30, house staff '12–'16 (medicine, obstetrics); on November 12, 1959. Before his retirement, Dr. Millea was chief of staff in obstetrics at Church Home and Hospital in Baltimore.

LOUISE PEARCE, M.D. '12, house staff '12–'13 (medicine); on August 10, 1959. Dr. Pearce discovered tryparsamide, a drug that was successful in the treatment of sleeping sickness, and went alone to the Belgian Congo to treat the natives with the new drug. For her work in Africa, she was awarded the Order of the Crown of Belgium, the Insignia of the Royal Order of the Lion, and the King Leopold II Prize from the Belgian government.

LON A. HAWKINS, PH.D. '13 (plant physiology); on November 24, 1959. Dr. Hawkins supervised the construction of the entomological research quarters at Beltsville, Md., and had done pioneer research in the refrigerated transportation of fruits and vegetables.

AMOS F. HUTCHINS, M.D. '13, fac. '23–'30, '34–'48 (urology); on November 11, 1959. Before his retirement, he practiced medicine in Baltimore.

CHARLES J. TILDEN, fac. '13–'19 (civil engineering); on November 15, 1959. Dr. Tilden was professor emeritus of engineering mechanics at Yale University and was an expert on traffic regulation.

THERESA KRAKER (MRS. J. E. H.) GUTHRIE, graduate nurse '14; on November 10, 1959. Mrs. Guthrie was a leader in the field of public health nursing.

J. ELDER HUTCHISON, M.D. '14; on November 21, 1959. He was a physician in Hartford, Conn.

CHARLES C. MACKLIN, fac. '14–'21 (anatomy); on November 23, 1959. Before his retirement in 1953, he was professor of histology and embryology at the University of Western Ontario.

MARIE L. T. MORSE, G. '14–'16 (physics); on September 25, 1959. She was living in Washington, D. C.

WILLIAM M. GOBER, JR., M.D. '15; on September 4, 1959. He was associated with the Kennestone Hospital in Marietta, Ga.

HAMILTON H. SMITH, arts '15–'16; on

February 12, 1960. He was living in Baltimore.

LOUISE E. PICKELL, G. '16–'18 (English), '21–'23 (political economy); on February 1, 1960. She was in the social service of the Family Welfare Association in Baltimore.

ROBERT E. HECHT, SR., arts '17–'18; on December 10, 1959. Before his retirement in 1947, he was a vice-president of the Hecht Company in Baltimore.

ELIAS N. RABINOWITZ, PH.D. '17 (Semitics); on February 9, 1960. Rabbi Rabinowitz was librarian at the Brooklyn Jewish Center in New York for twenty-three years.

ADOLF L. HAMBURGER, B.A. '18; on December 28, 1959. He was an investment counselor in Baltimore.

FREDERICK H. PARKS, engineering '18–'20; on December 23, 1959. He was a resident of Great Neck, N. Y.

CORA ARCHER (MRS. JOHN R.) SUDLER, graduate nurse '18; on October 11, 1959. She was living in Alexandria, Va.

WILLIAM H. H. WHITE, M.A. '18 (education); on June 29, 1959. He was a teacher in Wayne, Pa.

HERBERT F. ALDRIDGE, engineering '19–'20; on December 12, 1959. He was with the U. S. Geographic Office.

WINCHELL MCK. CRAIG, M.D. '19; on February 12, 1960. Dr. Craig was an authority on neurological surgery and was the former head of the neurological section at the Mayo Clinic and professor of neurological surgery at the University of Minnesota.

CHESTER B. HARRISON, arts '19–'22; on October 15, 1959. He was living in Montclair, N. J.

HENRY W. KELLEY, arts '19–'20; on October 6, 1959. He was a resident of Bangor, Me.

CARL B. SAIONTZ, arts '19–'21; on October 17, 1959. He was president of the Ronald Realty Company in Baltimore.

HARRY S. CANNON, PH.D. '20 (German literature); on October 27, 1959. He was professor emeritus of modern languages at Montana State College.

NORTON MERRYMAN (MRS. JOHN B.) JESSOP, graduate nurse '20; on December 19, 1959. She was living in Cockeysville, Md.

WILLIAM O. JOHNSON, M.D. '20; on February 5, 1960. He was the former head of the department of obstetrics and gynecology at the University of Louisville.

HENRY H. MORRISS, B.A. '20; on January 19, 1960. He was an executive of the Hutzler Brothers Company in Baltimore.

ALBERT G. SCHUELE, engineering '20–'21; on October 10, 1959. He was an electrical engineer in Baltimore.

FRANCES B. WILSON, graduate nurse '21; on August 11, 1959. She was living in Baltimore.

JAMES H. MCNEILL, B.A. '22; on November 19, 1959. He was a physician in Wilkesboro, N. C.

JAMES DORSEY BROWN, II, arts '23–'25, McCoy '25–'28, '31–'33; on July 31, 1958. He was senior partner and founder of J. Dorsey Brown & Company, an investment banking firm in Baltimore.

LINN FENIMORE COOPER, G. '23–'24 (chemistry), fac. '28–'30, house staff '29–'30 (medicine); on November 13, 1959. He was a physician in Sarawak, Borneo.

AARON WEXLER, M.A. '44, PH.D. '44, fac. '46–'47 (chemistry); on November 25, 1959. Dr. Wexler was associate director of the Westinghouse Research Laboratory in Pittsburgh and was known for his experiments in low-temperature research.

HARRY FREDERICK SCHNEIDER, B.S. '45; on November 4, 1959. He was a lawyer in Baltimore.

THOMAS J. LYNCH, G. '46–'47 (chemical engineering); on September 26, 1959. He was patent adviser for the Army Ordnance Missile Command in Huntsville, Ala.

FOSTER E. BENNETT, M.D. '48; on February 22, 1960. He was associated with the Philadelphia General Hospital.

HERBERT ALLAN KUSCHER, B.A. '56; on December 22, 1959. He was with Kameny Associates in Brooklyn, N. Y.

JOANNA DREYFUSS (MRS. BERNARD M.) COHEN, McCoy '32–'35, '38–'42, Hospital staff; on January 1, 1960. She was an au-

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diologist in the out-patient clinic at the Hospital.

JEROME B. GREEN, group chairman (ORO); on January 28, 1960. Dr. Green joined the ORO staff in 1950 and had also been a member of the staff of the Applied Physics Laboratory.

DONALD H. HALE, principal staff (APL); on November 7, 1959. Before joining the Applied Physics Laboratory staff in 1957, Colonel Hale had been commanding officer of the chemical warfare laboratories of the Army Chemical Center at Edgewood, Md.

JOHN H. TRESCHER, instructor in medicine; on November 15, 1959. Dr. Trescher was a specialist in internal medicine and had been on the Hopkins medical faculty since 1928.

THE ALUMNI

GEORGE L. RADCLIFFE, B.A. '97, PH.D. '00 (history), has been honored by the National Conference of Christians and Jews for his community service.

UDO J. WILE, M.D. '07, has received the honorary degree of doctor of law from the University of Michigan.

STANHOPE BAYNE-JONES, M.D. '14, M.A. '17 (pathology), fac. '15–'23, house staff '14–'17 (medicine, pathology), was awarded the honorary degree of doctor of laws by the Johns Hopkins University at the annual Commemoration Day exercises.

WALTER A. FANSLER, M.D. '14, has become professor emeritus of surgery at the University of Minnesota. He has also been made an honorary member of the Royal Society of Medicine in London.

KENT ROBERTS GREENFIELD, PH.D. '15 (history), fac. '30–'46 (modern European history), has been knighted by the Italian Government. For his scientific and historical studies of Italy, Dr. Greenfield has been awarded the cross of a *Cavaliere Ufficiale Al Merito.*

ALFRED S. NILES, JR., B.A. '15, has become professor emeritus of aeronautic engineering at Stanford University.

DORSEY RICHARDSON, B.A. '15, M.A. '17, PH.D. '20 (political science), has been named chairman of the board of William Street Sales, Incorporated, in New York.

MARGUERITE D. DARKOW, G. '16–'17 (mathematics), has become professor emeritus of mathematics at Hunter College.

FERDINAND HAESSLER, M.D. '16, has retired as professor and chairman of the department of ophthalmology at Marquette University.

EDITH H. MAAS LINCOLN, M.D. '16, has been awarded the Trudeau Medal by the National Tuberculosis Association for her contributions to the prevention and treatment of tuberculosis.

LAWRENCE REYNOLDS, M.D. '16, has received the Gold Medal from the American College of Radiology.

WILLIAM S. TILLETT, M.D. '17, fac. '20–'21, '30–'37 (medicine), house staff '19–'20 (private wards), has received the honorary degree of doctor of science from Northwestern University.

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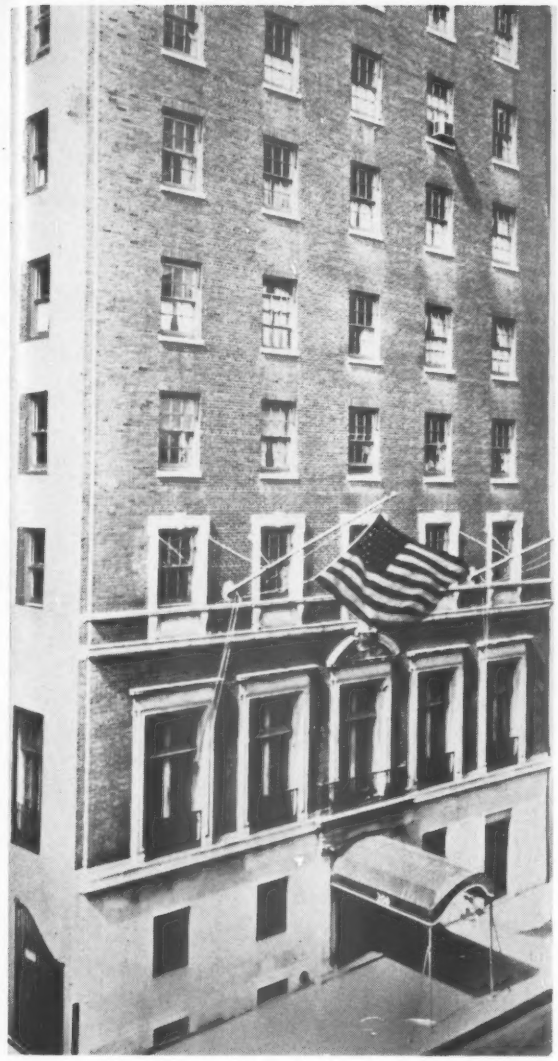

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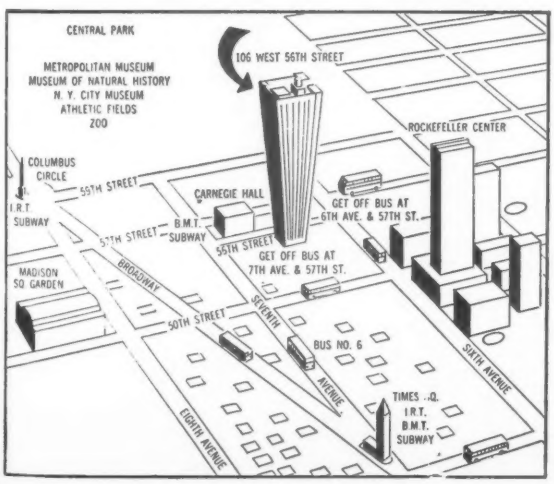

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